



**Billing Code: 3510-22-P**

**DEPARTMENT OF COMMERCE**

**National Oceanic and Atmospheric Administration**

**RIN 0648-XR011**

**Endangered and Threatened Species; Take of Anadromous Fish**

**AGENCY:** National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

**ACTION:** Notice; Applications for four new scientific research permits, seven permit renewals and two permit modifications.

**SUMMARY:** Notice is hereby given that NMFS has received 13 scientific research permit application requests relating to Pacific salmon, steelhead, and green sturgeon. The proposed research is intended to increase knowledge of species listed under the Endangered Species Act (ESA) and to help guide management and conservation efforts. The applications may be viewed online at:

*[https://apps.nmfs.noaa.gov/preview/preview\\_open\\_for\\_comment.cfm](https://apps.nmfs.noaa.gov/preview/preview_open_for_comment.cfm).*

**DATES:** Comments or requests for a public hearing on the applications must be received at the appropriate address or fax number (see ADDRESSES) no later than 5 p.m. Pacific standard time on [INSERT DATE 30 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** Written comments on the applications should be sent to the Protected Resources Division, NMFS, 1201 NE Lloyd Blvd., Suite 1100, Portland, OR 97232-1274. Comments may also be sent by e-mail to [nmfs.wcr-apps@noaa.gov](mailto:nmfs.wcr-apps@noaa.gov). Include the permit number in the subject line of email.

**FOR FURTHER INFORMATION CONTACT:** Shivonne Nesbit, Portland, OR at (503) 231-6741 or by e-mail: [Shivonne.Nesbit@noaa.gov](mailto:Shivonne.Nesbit@noaa.gov). Permit application instructions are available from the address above, or online at <https://apps.nmfs.noaa.gov>.

**SUPPLEMENTARY INFORMATION:**

**ESA-Listed Species Covered in This Notice**

- Chinook salmon (*Oncorhynchus tshawytscha*): threatened California Coastal (CC); endangered Sacramento River winter-run (SRWR); threatened Central Valley spring-run (CVSR).
- Coho salmon (*O. kisutch*): threatened Southern Oregon/Northern California Coast (SONCC); endangered Central California Coast (CCC).
- Steelhead (*O. mykiss*): threatened Northern California (NC); threatened Central California Coast (CCC); threatened California Central Valley (CCV).
- North American green sturgeon (*Acipenser medirostris*): threatened southern distinct population segment (sDPS).

**Background**

*Permit 13791-6M*

The U.S. Fish and Wildlife Service (FWS) is seeking to modify a 5-year permit that currently allows them to take juvenile CVSR and SRWR Chinook salmon, juvenile CCV steelhead and juvenile green sturgeon in the lower Sacramento and San Joaquin Rivers and SF estuary, CA. The purposes of the research are to assess (1) abundance, temporal and spatial distribution, and survival of salmonids, (2) occurrence and habitat use of fishes within the Liberty Island and Cache Slough Complex, (3) relative gear efficiency for fish survey nets, and also the distribution of Delta smelt, (4) littoral habitat

use of juvenile Chinook salmon within the Delta, (5) abundance and distribution of Delta smelt, (6) length at date race criteria of winter run sized and larger Chinook salmon, (7) winter and spring run sized Chinook salmon floodplain usage in the Yolo bypass, and (8) salmonid genetic monitoring. The FWS proposes to capture fish with seines (beach and purse), nets (fyke and gill), boat and backpack electroshocking, trawls (midwater and bottom), and with rotary screw traps. The FWS would also observe fish during snorkel and spawning ground surveys. A subset of the captured fish would be anesthetized, measured, weighed, tagged (acoustic or PIT), dye injected (tattoo, photonic) have a tissue sample taken, allowed to recover, and released. This modification is requested because the original permit application did not include take of adult salmon. The FWS is requesting take for adult SRWR and CVSR Chinook salmon, and CCV steelhead. While the FWS does not target adult fish, encounters with adult fish have occurred. The researchers would avoid adult salmonids, but some may be encountered as an unintentional result of sampling.

*14808-4M*

The California Department of Fish and Wildlife (CDFW) is seeking to modify a 5-year permit that currently allows them to take juvenile and adult SRWR and CVSR Chinook salmon, CCV steelhead and green sturgeon in the Central Valley of CA. The purposes of the research are to (1) monitor the outmigration of juvenile salmonids on a real-time basis, (2) provide daily summaries of timing, abundance and size distribution of salmonids in the Sacramento River, (3) provide timing information to water agencies for better management decisions, (4) examine how environmental conditions (flow, temperature, turbidity) affect the downstream movement of juvenile salmonids, and (5)

provide recommendations for the development of steelhead monitoring programs to assess restoration and recovery goals. The objectives of the steelhead monitoring program are to (1) estimate steelhead population abundance with estimated levels of precision in the Central Valley, (2) examine trends in steelhead abundance in the Central Valley, and (3) identify the spatial distribution of steelhead in the Central Valley to identify their current range and observe changes over time. The CDFW proposes to capture fish with rotary screw traps and to observe fish at weirs, fish ladders, dams and during snorkel surveys. Captured fish would be anesthetized, measured, weighed, tagged (acoustic, Floy, Elastomer, or PIT), have a tissue sample taken, allowed to recover, and released. The modification is requested because the original permit application included an indirect mortality rate of one percent for rotary screw trapping and the application is requesting a three percent indirect mortality rate. The researchers do not intend to kill any listed fish, but some may die as an inadvertent result of the research.

*15169-2R*

The National Park Service (NPS) Point Reyes Station is seeking to renew for five years a research permit that currently allows them to take juvenile and adult CC Chinook salmon, CCC coho, and CCC steelhead along the central coast of California. The purposes of the research are to (1) monitor juvenile salmonid outmigration, (2) study the diet of juvenile salmonids, (3) document adult salmonid spawning, (4) study juvenile salmonid distribution and population abundance, (5) study winter habitat utilization, (6) document adult escapement, and (7) study fish movements in Tomales Bay. The NPS proposes to capture fish with nets (fyke, seine, beach), backpack electroshocking, weirs, and rotary screw traps and to observe fish during snorkel and spawning ground surveys.

A subset of captured fish would be anesthetized, measured, weighed, tagged (acoustic, FLOY or PIT), dye injected (tattoo, photonic) have a tissue sample taken, have stomachs pumped for diet analysis, allowed to recover, and released. The researchers do not intend to kill any listed fish, but some may die as an inadvertent result of the research.

16344-3R

The Oregon State University is seeking to renew for five years a research permit that currently allows them to take juvenile listed hatchery SONCC coho in the Upper Klamath River.

The purposes of this research are to (1) determine the effects of infection by the myxozoan parasite *Ceratonova shasta* on coho salmon, and (2) estimate disease effects for each study year on the wild coho population. Juvenile coho salmon from Iron Gate and/or Trinity River hatcheries would be transported to selected locations on the Klamath River and monitored for disease after the exposure to *C. shasta*. Following exposure, all fish would be transported to the Oregon State University J. L. Fryer Aquatic Animal Health Laboratory where time to morbidity, overall morbidity and infection prevalence would be ascertained through microscopic and molecular analysis of intestinal tissues. Because all of the fish will be exposed to the parasite *C. shasta*, they can not be released after the experiments. In addition, infection prevalence data are needed which requires euthanizing all fish surviving the exposures, since surviving fish may still be infected with the parasite.

16491-3R

Fawcett Ecological Consulting is seeking to renew for five years a research permit that currently allows them to take juvenile CC Chinook salmon, CCC coho and CCC

steelhead in coastal Northern California streams. The purposes of the research are to (1) monitor salmonid populations in Salmon Creek, Sonoma County, in relation to habitat restoration and coho restocking efforts, and (2) study the genetics, variability in abundance, and life histories of steelhead in small coastal streams. The applicant proposes to capture fish using beach seines and to observe fish during snorkel and spawning ground surveys. A subset of captured fish would be anesthetized, measured, weighed, tagged (FLOY), have a tissue sample taken, allowed to recover, and released. The researchers do not intend to kill any listed fish, but some may die as an inadvertent result of the research.

*16506-3R*

Mike Podlech, an independent researcher, is seeking to renew for five years a research permit that currently allows him to take juvenile and adult CCC coho and steelhead in Squaw and Pescadero creeks in Sonoma and San Mateo counties. The purposes of the research are to (1) monitor CCC steelhead population trends in Squaw and Pescadero creeks, (2) assess whether previous coho salmon broodstock releases have resulted in wild progeny in Pescadero Creek, and (3) to gather population data to inform ongoing watershed restoration and salmonid recovery efforts in Pescadero Creek. The applicant proposes to capture fish with a fyke net and backpack electrofishing. A subset of the captured fish would be anesthetized, measured, weighed, have a tissue sample taken, allowed to recover, and released. The researchers would avoid adult salmonids, but some may be encountered as an unintentional result of sampling. The researchers do not intend to kill any listed fish, but some may die as an inadvertent result of the research.

*17751-3R*

The CDFW is seeking to renew for five years a research permit that currently allows them to take juvenile green sturgeon, adult CCV steelhead, and adult SRWR and CVSR Chinook salmon in the Sacramento-San Joaquin Delta in San Francisco Bay, CA. The purposes of the research are to (1) document juvenile green sturgeon movement, emigration patterns, and survival, and (2) to determine the timing of Pacific Ocean entry and subsequent ocean migration patterns. The applicant proposes to capture fish with a gill net. Captured green sturgeon would be anesthetized, measured, weighed, tagged (acoustic or sonic), have a tissue sample taken, allowed to recover, and released. The researchers would avoid adult salmonids, but some may be encountered as an unintentional result of sampling. The researchers do not intend to kill any listed fish, but some may die as an inadvertent result of the research

*17913-2R*

Stillwater Sciences is seeking to renew for five years a research permit that currently allows them to take juvenile CCC steelhead in the Lower Tuolumne and San Joaquin rivers, CA.

The purposes of the research are to (1) provide information on the effects to fish populations from flow management of the Don Pedro Project downstream of La Grange Dam, and (2) provide information on the abundance and habitat use of non-listed fish species to evaluate the effects of past and ongoing habitat restoration and management actions. The applicant proposes to capture fish with beach seines and to observe fish during snorkel surveys.

Captured fish would be anesthetized, measured, weighed, tagged (PIT), allowed to recover, and released. The researchers do not intend to kill any listed fish, but some may die as an inadvertent result of the research.

*19400-3R*

ICF Consulting is seeking to renew for five years a research permit that currently allows them to take juvenile natural and listed hatchery SRWR and CVSR Chinook salmon, CCV steelhead and juvenile green sturgeon in Suisan Bay, CA. The purposes of the research are to (1) determine the spatial and temporal distribution and abundance of juvenile Chinook salmon in shallow-water habitats and compare observed patterns to predictions from habitat suitability models, and (2) provide baseline fish and invertebrate samples for a Before-After Control-Impact (BACI) study design to assess the impact of a planned breach at the Tule Red restoration site. The applicant proposes to capture fish with seines (beach, Lampara), nets (fyke), and trawls (midwater, otter). This study would result in the capture, handle, and release of juvenile green sturgeon and intentional directed mortality of juvenile salmon for isotopic and otolith analysis.

*22270*

The Wiyot tribe is seeking a five-year research permit that would allow them to annually take juvenile NC steelhead in the South Fork of the Eel River, CA. The purposes of the research are to (1) to evaluate the impacts of Sacramento pikeminnow, a non-native predator, on Pacific lamprey, steelhead, and other native species, and (2) to develop and test methods for pikeminnow population suppression in terms of catch-per-unit-effort and cost-per-fish-captured. The applicant proposes to capture fish with backpack and boat electrofishing, fyke net, seine, baited frame traps, dip netting and



hook-and-line and to observe fish during snorkel surveys. A subset of captured fish would be anesthetized, measured, weighed, have a tissue sample taken, allowed to recover, and released. The researchers do not intend to kill any listed fish, but some may die as an inadvertent result of the research.

22303

The NOAA Fisheries California Central Valley office is seeking a five-year research permit that would allow them to annually take adult SRWR, CVSR, and CC Chinook salmon, subadult and adult green sturgeon. The purpose of the research is to test the use of DIDSON cameras to characterize the physical interaction between green sturgeon and the halibut bottom trawl fishery (CHBT) operating out of Half Moon and San Francisco bays. In a previous cooperative study conducted with CHBT fishermen, NOAA observers, NMFS Science Center staff, and the CDFW, satellite tags were used to measure green sturgeon post-release survival in the halibut fishery. In this study, researchers would test the use of DIDSON cameras in the CHBT nets to characterize the physical interaction between green sturgeon and CHBT nets. Study results would be used to evaluate methods to minimize gear interactions and bycatch of green sturgeon. The applicant proposes to capture fish with a bottom trawl. Captured green sturgeon would be captured, handled and released. The researchers would avoid adult salmonids, but some may be encountered as an unintentional result of sampling. The researchers do not intend to kill any listed fish, but some may die as an inadvertent result of the research

22700

The Monterey Bay Salmon and Trout Project (MBSTP) is seeking a five-year research permit that would allow them to annually take adult CC coho and CCC steelhead

in the San Lorenzo River, CA. The purpose of the research is to gather genetic and life history data on CCC steelhead. This research will contribute to large-scale salmonid monitoring programs on the San Lorenzo River that are currently being implemented by the City and County of Santa Cruz. The applicant proposes to capture fish at the Felton Diversion Facility weir. Captured adult steelhead would be measured, weighed, PIT tagged, have a tissue sample taken, allowed to recover, and released. Adult coho would be captured, handled and released. The researchers do not intend to kill any listed fish, but some may die as an inadvertent result of the research.

22939

Tim Salamunovich of TRPA Fish Biologist is seeking a 5-year research permit that would allow him to annually take juvenile SRWR and CVSR Chinook salmon, CCV steelhead and green sturgeon in a central valley delta wetland area known as The Big Ditch on the Peterson Ranch in eastern Solano County, California. The purpose of this research is to collect seasonal presence/absence and relative abundance data to document seasonal fish use throughout the project area in order to document the baseline conditions prior to restoration efforts. The applicant proposes to capture fish with beach seines and minnow traps. Captured fish would be anesthetized, measured, weighed, allowed to recover, and released. The researchers do not intend to kill any listed fish, but some may die as an inadvertent result of the research.

### **Authority**

Scientific research permits are issued in accordance with section 10(a)(1)(A) of the ESA (16 U.S.C. 1531 *et seq.*) and regulations governing listed fish and wildlife permits (50 CFR 222-226). NMFS issues permits based on findings that such permits:

(1) are applied for in good faith; (2) if granted and exercised, would not operate to the disadvantage of the listed species that are the subject of the permit; and (3) are consistent with the purposes and policy of section 2 of the ESA. The authority to take listed species is subject to conditions set forth in the permits.

Anyone requesting a hearing on an application listed in this notice should set out the specific reasons why a hearing on that application would be appropriate (see ADDRESSES). Such hearings are held at the discretion of the Assistant Administrator for Fisheries, NMFS.

#### Applications Received

This notice is provided pursuant to section 10(c) of the ESA. NMFS will evaluate the applications, associated documents, and comments submitted to determine whether the applications meet the requirements of section 10(a) of the ESA and Federal regulations. The final permit decisions will not be made until after the end of the 30-day comment period. NMFS will publish notice of its final action in the **Federal Register**.

Dated: June 21, 2019.

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Angela Somma,

Chief, Endangered Species Conservation Division,

Office of Protected Resources, National Marine Fisheries Service.

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